THE INVENTION CLAIMED IS

1. An antenna for transmitting a radio frequency signal, comprising:

a first electrically conductive sheet;

a second electrically conductive sheet spaced a first distance apart from said first metallic sheet; and

an axially extending leg electrically connected to said first electrically conductive sheet and said second electrically conductive sheet, said axially extending leg being electrically conductive.

2. An antenna as claimed in claim 1, wherein said first electrically conductive sheet, said second electrically conductive sheet, and said axially extending leg are made of metal.

3. An antenna as claimed in claim 1, wherein said first electrically conductive sheet, said second electrically conductive sheet, and said axially extending member are made from a unitary sheet of metal.

4. An antenna as claimed in claim 1, wherein said first electrically conductive sheet has a first arcuate-shaped outer edge and said second electrically conductive sheet has a second arcuate-shaped outer edge wherein said axially extending member extends from said first arcuate-shaped outer edge to said second arcuate-shaped outer edge.

5. An antenna as claimed in claim 4, wherein said first arcuate-shaped outer edge has a first radius extending from a first center point and said second arcuate-shaped outer edge has a second radius extending from a second center point.

6. An antenna as claimed in claim 5, wherein the first center point and the second center point are contained on a centerline, and said first electrically conductive sheet and said second electrically conductive sheet are contained in a first plane and a second plane wherein the first plane is parallel to the second plane and the centerline is normal to the first plane and the second plane.

7. An antenna as claimed in claim 6, wherein said first electrically conductive sheet has a first surface area and said second electrically conductive sheet has a second surface area, wherein said first surface area is greater than the second surface area.

8. An antenna as claimed in claim 7, wherein said first electrically conductive sheet and said second electrically conductive sheet include cut-out sections.

9. An antenna as claimed in claim 1, further comprising a cable electrically coupled to said first electrically conductive sheet and said second electrically conductive sheet.

10. An antenna as claimed in claim 9, wherein said cable is coaxial cable.

11. An antenna as claimed in claim 1, wherein said first electrically conductive sheet is spaced apart a distance from said second electrically conductive sheet and is approximately equal to or a multiple of a wavelength distance of the frequency transmitted from said antenna.

12. An antenna as claimed in claim 11, wherein said axially extending leg has a length equal to the spaced apart distance.

13. An antenna as claimed in claim 1, further comprising a metallic cup electrically coupled to said first electrically conductive sheet.

14. An antenna as claimed in claim 13, wherein said cup includes an opened top structure having a cylindrically-shaped sidewall attached to a bottom wall.

15. An antenna as claimed in claim 14, wherein a portion of said bottom wall slopes away from the open top portion toward a central axial axis passing through said cup.

16. An antenna as claimed in claim 15, wherein said portion of said bottom wall is frusta-conical in shape.

17. An antenna as claimed in claim 16, wherein said bottom wall further includes a central flat portion connected to an end of the frusta-conical shaped portion.

18. An antenna as claimed in claim 17, wherein said central flat portion is circular in shape.

19. An antenna as claimed in claim 14, wherein said first electrically conductive sheet comprises a tab extending therefrom contacting said cup.

20. An antenna as claimed in claim 14, wherein said first electrically conductive sheet is spaced a second distance from said bottom wall.

21. An antenna as claimed in claim 20, wherein the second distance is approximately equal to or a multiple of a wavelength distance of the frequency to be transmitted from the antenna.

22. An antenna as claimed in claim 1, further comprising a mechanical register at least partially received between said first conductive sheet and said second conductive sheet.

23. An antenna as claimed in claim 1, further comprising an electrical frequency generator electrically coupled to said first electrically conductive sheet.

24. An antenna as claimed in claim 23, wherein said frequency generator is electrically coupled to a coaxial cable which is electrically coupled to said first electrically conductive sheet.

25. An antenna as claimed in claim 23, further comprising a power source electrically coupled to said frequency generator.

26. An antenna as claimed in claim 25, wherein said power source is a battery.

27. An antenna as claimed in claim 23, further comprising a circuit board that includes said frequency generator, said circuit board attached to said first electrically conductive sheet.

28. An antenna as claimed in claim 13, further comprising a metallic meter case, said metallic cup received within said metallic meter case.

29. A meter register, comprising:

a register body having a rotatable drive shaft coupled thereto;

a drive gear attached to said drive shaft, at least one follower gear rotatably attached to said register body and coupled with said drive gear; and

an antenna, comprising a first electrically conductive sheet, a second electrically conductive sheet, and an axially extending leg electrically connected to said first

electrically conductive sheet and said second electrically conductive sheet, said first electrically conductive sheet spaced an axial distance away from said second electrically conductive sheet wherein at least a portion of said register body is sandwiched between said first electrically conductive sheet and said second electrically conductive sheet.

30. A meter register as claimed in claim 29, further comprising an odometer coupled to said drive gear and at least one follower gear.

31. A meter register as claimed in claim 30, wherein said rotatable drive shaft has a magnetic member attached at a first end and an indicator which attaches at a second end and wherein said register drive shaft extends along a longitudinal axis and said first electrically conductive sheet is contained in a first plane and said second electrically conductive sheet is contained in a second plane, the longitudinal axis being normal to the first plane and the second plane.

32. A meter register as claimed in claim 30, further comprising a sensing follower gear rotatably secured to said body and coacting with said drive gear, said sensing follower gear rotates about a sensing axis and a sensing magnet coacting with said sensing follower gear and radially spaced from the sensing axis whereby when said sensing follower gear rotates about the sensing axis, said magnet rotates about the sensing axis in a rotating plane, and a first magnetically activated switch attached to said body spaced an axial distance from said rotating magnet plane, whereby when said magnet and said first magnetically activated switch are radially aligned, said first magnetically activated switch is in a first state and when said magnet is not radially aligned with said first magnetically activated switch, said magnetically activated switch is in a second state.

33. A meter register as claimed in claim 32, further comprising a second magnetically activated switch attached to said body spaced an axial distance away from the rotating magnet plane, said second magnetically activated switch is spaced circumferentially from said first magnetically activated switch, whereby when said second magnetically activated switch and said magnet are radially aligned, said first magnetically activated switch is in a first state and when said magnet is not radially aligned with said second magnetically activated switch, said second magnetically activated switch is in a second state, and wherein said magnet is adapted to rotate relative to said first magnetically activated switch and said second magnetically activated switch, whereby depending on the position of said magnet

either none, one, or both of said first magnetically activated switch and said second magnetically activated switch are activated and wherein as the magnet rotates about the sensing axis relative to said first magnetically activated switch and said second magnetically activated switch, a rotational direction of said sensing follower gear can be determined by monitoring a sequence of the first state and second state of said first magnetically activated switch and said second magnetically activated switch.

34. A meter register as claimed in claim 33, wherein said first magnetically activated switch and said second magnetically activated switch are reed switches.

35. A meter register as claimed in claim 34, wherein said reed switches are electrically coupled to a microprocessor for determining a direction of rotation of said magnet.

36. A meter register as claimed in claim 30, further comprising a detection switch for detecting tampering of said register, whereby when said tampering switch is activated through tampering a fixed period of time, said register emits a signal that said register has been tampered with.

37. A meter register as claimed in claim 30, further comprising a magnetically activated switch attached to said body wherein when a magnetic field activates said magnetically activated switch for a fixed period of time, said register emits a signal that said register has been tampered with.

38. A meter register as claimed in claim 29, having a metallic body attached to a clear face to form a sealed internal chamber via an elastomeric sealing member, said sealed internal chamber receiving said register body.

39. A meter register as claimed in claim 38, wherein said internal chamber is maintained at a pressure of minus 9 atmospheres.

40. A meter register as claimed in claim 39, further comprising a microprocessor contained within said chamber, wherein said microprocessor is electrically coupled to said antenna.

41. An antenna adapter comprising a circular metallic ring, a first electrically conductive sheet, and a second electrically conductive sheet axially spaced from

said second electrically conductor sheet and a cable electrically connecting said metallic ring and said first electrically conductive sheet and said second electrically conductive sheet, wherein said metallic ring is adapted to be secured to an exterior portion of a meter register.

42. An antenna adapter as claimed in claim 41, further comprising an electric insulator sandwiched between said first electrically conductive sheet, said second electrically insulating sheet, and said first electrically conductive sheet, said second electrically conductive sheet, said metallic ring, and said cable are surrounded by electrically insulating waterproof material.

43. An antenna adapter as claimed in claim 41, wherein said cable is coaxial cable.

44. A utility meter, comprising:

a meter body having a chamber through which material passes;

a measuring unit contained within said chamber, said chamber comprising a rotating member, said rotating member having a magnetic member; and

a sealed register attached to said chamber, said register comprising:

a register body having a rotatable drive shaft coupled thereto;

a magnet attached to said drive shaft and coacting with said magnetic member;

a drive gear attached to said drive shaft, at least one follower gear rotatably attached to said register body and coupled with said drive gear;

an antenna, comprising a first electrically conductive sheet, a second electrically conductive sheet, and an axially extending leg electrically connected to said first electrically conductive sheet, said first electrically conductive sheet spaced an axial distance away from said second electrically conductive sheet, wherein at least a portion of said register body is sandwiched between said first electrically conductive sheet and said second electrically conductive sheet; and

a metallic body attached to a clear face to form a sealed internal chamber, said sealed internal chamber receiving said register body.

45. A meter as claimed in claim 44, wherein said register transmits periodically or nonperiodically via said antenna signal identifying a meter code and utility consumption.

46. A meter as claimed in claim 45, wherein said signal identifies an actual odometer meter reading corresponding to said odometer reading of said meter odometer.

47. A meter as claimed in claim 46, wherein said meter issues an alarm if the flow rate exceeds a fixed flow rate or the flow rate does not change over a period of time.

48. A method for measuring a utility, comprising the following steps:

a) providing a meter;

b) providing a meter register;

c) transmitting a signal from a meter register, said signal identifying said meter-type identification code, and utility consumption; and

d) receiving said information by a central authority.

49. A method as claimed in claim 48, further comprising the step of transmitting information if said meter has been tampered with.

50. A method as claimed in claim 49, wherein said tampering comprises subjecting said meter register to a magnetic field above a threshold value.

51. A method as claimed in claim 48, wherein said meter is a fluid meter, said method further comprising the step of determining reverse flow through said meter and transmitting such information.

52. A method as claimed in claim 48, wherein said signal includes information corresponding to an odometer reading on said meter.

53. A method as claimed in claim 48, wherein said meter is adapted to receive signals from an external source.

54. A method as claimed in claim 53, further comprising the step of transmitting a signal from an external source to adjust the transmitting signal odometer reading.

55. A method as claimed in claim 48, further comprising the step of providing a database containing the received information by the central authority.

56. A method as claimed in claim 55, wherein said database is accessible by a third party.

57. A method as claimed in claim 56, wherein said third party is an end user which is responsible for the meter.

58. A method as claimed in claim 57, wherein said database is internet accessible.

59. A method as claimed in claim 48, wherein said meter transmits a signal if there is a utility leak and said method further comprising the step of notifying a third party to report a leak.

60. A method as claimed in claim 59, wherein said notification occurs either via an alarm or a signal sent to a phone or a pager.

61. A method as claimed in claim 48, wherein said signal is received by a receiver mounted on a vehicle.

62. A method as claimed in claim 48, further comprising the step of providing shut-off means in a fluid line which is fluidly coupled to said meter and opening and closing said valve depending on the amount of fluid measured by said meter.

63. A meter register, comprising:

a register body having a rotatable drive shaft coupled thereto;

a drive gear attached to said drive shaft, at least one follower gear rotatably attached to said register body and coupled with said drive gear;

a sensing follower gear rotatably secured to said body and coacting with said drive gear, said sensing follower gear rotates about a sensing axis and a sensing magnet coacting with said sensing follower gear and radially spaced from the sensing axis whereby when said sensing follower gear rotates about the sensing axis, said magnet rotates in a rotating plane about the sensing axis;

a first magnetically activated switch attached to said body spaced an axial distance from said rotating magnet plane, whereby when said magnet and first magnetically activated switch are radially aligned, said first magnetically activated switch is in a first state and when said magnet is not radially aligned with said first magnetically activated switch, said magnetically activated switch is in a second state; and

a second magnetically activated switch attached to said body spaced an axial distance away from the rotating magnet plane, said second magnetically activated switch is

spaced circumferentially from said first magnetically activated switch, whereby when said second magnetically activated switch and said magnet are radially aligned, said first magnetically activated switch is in a first state and when said magnet is not radially aligned with said second magnetically activated switch, said second magnetically activated switch is in a second state, and wherein said magnet is adapted to rotate relative to said first magnetically activated switch and said second magnetically activated switch, whereby depending on the position of said magnet either none, one, or both of said first magnetically activated switch and said second magnetically activated switch are activated and wherein as the magnet rotates about the sensing axis relative to said first magnetically activated switch and said second magnetically activated switch, a rotational direction of said sensing follower gear can be determined by a monitoring sequence of the first state and second state of said first magnetically activated switch and said second magnetically activated switch.

64. A meter register as claimed in claim 63, wherein said magnet is rotatably coupled to said register drive shaft and rotates in a circle in a plane spaced a distance apart from said first and second magnetically spaced switches, wherein the circle is defined into a plurality of regions, said plurality of regions comprising a first region, a second region, a third region, and a fourth region, wherein the first magnetically activated switch and the second magnetically activated switch are in the first state when said magnet is in the first region, the first magnetically activated switch is in the first state and said second magnetically activated switch is in the second state when said magnet is in the second region, said first magnetically activated switch and said second magnetically activated switch are in the second state when said magnet is in the third region, said first magnetically activated switch is in the second state and said first magnetically activated switch is in the first state when said magnet is in the forth region, whereby sensing the position of the magnet in the sequential order of the first region, the second region, to the third region, and to the fourth region indicates movement of said magnet in a first direction and sensing the position of the magnet in the sequential order of the fourth region, to the third region, to the second region, and to the first region indicates movement of the magnet in a second direction, whereby sensing of the magnet direction is indicative of a gear wheel direction and a direction of flow through a meter on which said meter register cooperates.

65. A meter register as claimed in claim 64, wherein the region in which said magnet is located is indicative of a position of a meter main wheel.